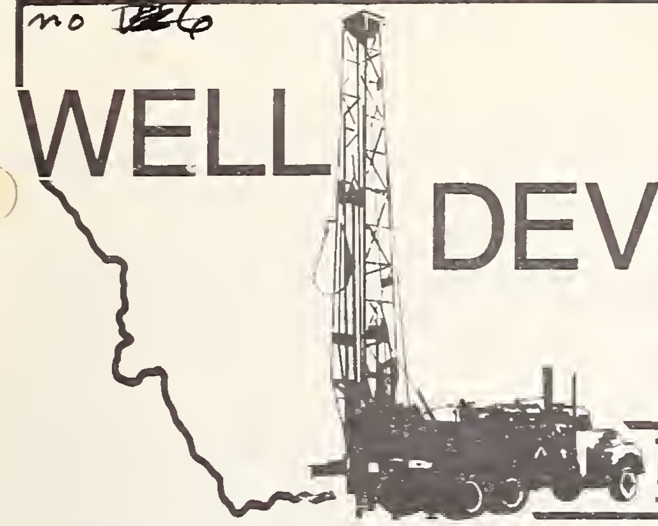
S
628.114
W4wd
no 6

Montana State Library
3 0864 1006 7299 0
APR 26 1989
MONTANA STATE LIBRARY
1515 E. 6th AVE.
HELENA, MONTANA 59620



WELL DEVELOPMENTS

No. VI | Board of Water Well Contractors | April 1989

Your Newsletter

This newsletter is being published by the Board of Water Well Contractors for your benefit. We attempt to address items which are of interest and importance to those of you in the industry. These articles often include changes in the law and rules. If you know of someone in your field who does not appear to be keeping abreast of what is happening within the Board's regulatory authority, let them know that they can catch up with past copies of the newsletters. If they do not have the newsletters, they can contact the Board office and copies will be sent.

A brief reader survey is enclosed with this issue of *Well Developments*. We want to know what you like and dislike about the newsletter, and how it can better meet our reader's needs. Please complete the self-addressed, stamped survey card and drop it in the mail. Remember, these newsletters are a means of keeping you up-to-date. If there is a subject you would like to see addressed, please indicate it on the enclosed survey postcard and return it to the Board's office. Thanks for your input!

Hydrogeology Summer Field Course

Montana Tech in Butte is again offering the Hydrogeology Summer Field Course July 10-August 11, 1989. The course is conducted in conjunction with the Montana Bureau of Mines and Geology, the University of Montana, and Montana State University. The course in applied hydrogeology is specifically oriented to groundwater. Surface-water hydrogeology is a marginal part of the course. Students will work with field equipment used to collect hydrogeological data. Aquifer-test methods, hydrochemistry and geophysical techniques will be emphasized. The course is part of the graduate and undergraduate program in hydrogeology offered at Montana Tech.

A background in geology is essential. A minimum of a 3-credit course in hydrogeology or a sound background in hydrogeology is required. In special cases, consent of the course director may be obtained after consultation.

The five-week course runs five days per week, eight to ten hours a day. It includes field work following introductory lectures. Additional study, data sorting and interpretation, and preparing reports is necessary after class hours.

The class has limited enrollment. Persons interested should contact John L. Sonderegger or Willis D. Weight, Montana College of Mineral Science and Technology, Butte, MT 59701, 406-496-4159.

PLEASE RETURN

Monitoring Well Construction Standards

The Board of Water Well Contractors has adopted minimum monitoring well construction standards, effective November 24, 1988. These are minimum construction standards and allow flexibility for almost any type of situation. Copies are available from the Board office. In addition, the Board will be mailing a reduced-size copy which you will be able to insert into your "Blue Books" (books that contain the law and rules). Anyone needing a Blue Book may obtain one from the Board office.

Casing Perforations

On January 27, 1989, an amendment to the rule on casing perforations, ARM 36.21.650, became effective. The rule originally only prohibited casing perforations above the lowest expected static water level. The following changes were made.

"(2) Casing perforations that allow the well casing to act as a conduit for deleterious interflow between aquifers shall not be permitted (that is, waters of different heads, different temperatures, and different quality).

(3) Dual completions of unconsolidated and bedrock aquifers shall be permitted only with prior board approval.

(4) Perforations shall not be placed to allow cascading water within the well casing during static conditions.

(5) Perforations shall not be placed to allow upward artesian flow from one aquifer to another."

Casing perforations above the lowest expected static water level are still prohibited. Please keep this standard in mind when dealing with multiple aquifers. If the well you are drilling cannot be completed within the above standards, please request a variance as provided for in ARM 36.21.680 prior to completion of the well.

Should you have any questions with regard to the above rule and the recent amendment, please contact the Board of Water Well Contractors' office.

Unlicensed Drillers — Reporting Procedures

The Board of Water Well Contractors' office continues to receive reports of unlicensed drillers operating in different parts of Montana. These reports are investigated by the Board's program specialist or by personnel from the local Field Office of DNRC's Water Rights Bureau.

You can help us eliminate unlicensed drilling by following a few guidelines when you call in a report. It is important to notify us as soon as you spot any unlicensed drilling activity, and give detailed directions so we can find the drilling rig. Highway numbers, distances, addresses, even section, township, and range numbers will help pinpoint the unlicensed driller's location.

If the rig is already gone, or if a customer has notified you of the activity, we will need the well owner's name and address. We realize that some well owners are reluctant to give information that will result in an action taken against the person who drilled their well, and others will wish to remain anonymous. But filing a complaint has little effect unless we can find the reported well and the unlicensed driller. The person calling in the report should leave his or her name and phone number.

The Board's office has also requested that the person reporting the unlicensed driller submit a brief but detailed written report to follow up the telephone call. This information may aid the Board's office, the field office, or the county attorney during further investigation.

Section 37-43-312, MCA makes unlicensed drilling a misdemeanor offense, subject to a fine of not more than $500 or imprisonment in a county jail for a term not to exceed 6 months, or both. The action will be prosecuted by the county attorney in the county where the violation occurs.

There is no guarantee of competency when an unlicensed driller constructs the well. Applicants for contractor and driller licensure must have one year of experience under a licensed water well contractor, pass an extensive exam, and furnish a $4,000 bond. The bond guarantees the licensee's work and provides a remedy which the Board may invoke to correct faulty work. Licensed contractors and drillers are also required to follow minimum construction standards that ensure proper well construction.

Although the Board can request a misdemeanor action through the county attorney, it cannot require the unlicensed driller to return to the site and correct any faulty construction. The customer is forced to seek legal remedies, which can be an expensive process. In the meantime, the well may not be operable. The customer might have to hire a licensed contractor to drill a second well that meets the minimum standards for water well construction. The customer could end up paying for two wells when only one was necessary. Also, the improperly constructed well may have to be plugged to prevent contamination, at additional expense. And there is a risk that the faulty well may lead to contamination of neighboring wells and subsequent legal actions filed against the well owner.

The individual who reports the unlicensed driller usually does not have to appear in court. Either the Board's program specialist or staff from the local Water Rights Bureau Field Office will conduct an investigation and submit a report to the county attorney and the Board. Such a report generally contains enough information for the county attorney to pursue the case.

To report an unlicensed driller, call the Board of Water Well Contractors' office in Helena at 444-6643.

Board of Water Well Contractors Activities in 1988

As of December 31, 1988, Montana has 175 licensed water well contractors, 20 licensed water well drillers, and 19 licensed monitoring well constructors.

A total of 46 licensing exams were given in 1988, including 12 for water well contractors, 5 for water well drillers, and 29 for monitoring well constructors. Thirty-nine persons passed the exams: 11 water well contractors, 3 water well drillers, and 25 monitoring well constructors. In addition, the Board has approved 103 applications for the monitoring well constructors' examination.

The Board held six meetings and published two editions of the *Well Developments* newsletter. Topics of discussion at the Board meetings included: legislation for monitoring well constructor licensure, minimum monitoring well construction standards, application approvals for monitoring well constructor's licenses, iron bacteria in water wells, abandoned wells, variances for minimum water well construction standards, and bonding for state and federal employees for the monitoring well licenses. One item of particular importance was the legal opinion from the Board's attorney that **any** well for domestic purposes is considered a water well regardless of the depth. Therefore, it must meet minimum water well construction standards and be drilled by a licensed water well contractor.

Five meetings of the Monitoring Well Advisory Task Force (MWATF) were held to discuss monitoring well construction standards rules. A public hearing was held on September 30. Final rule adoption was completed on November 24, 1988. Many hours of research, discussion, and drafting were spent by the members of the MWATF to finalize a workable set of minimum construction standards for monitoring wells.

The Board published an information pamphlet entitled "Water Well Drilling for the Prospective Well Owner." The pamphlet is intended to answer any questions a well owner may have prior to the well being drilled. It provides basic information on construction of the water well, amount of water needed, proper location, disinfection, water rights filings, and maintenance of the completed well. Free copies are available from the Board office.

Six complaints were filed. One of these was an unlicensed driller complaint, one was regarding a land owner who was drilling his own well without a permit, and four were consumer complaints. Of the six complaints, five have been resolved. Two complaints from 1987 were also resolved.

The Board's program specialist, Diana Cutler, spent five weeks in Butte attending the Montana Tech's Summer Hydrology Field Course. She also attended the fall conference for the Montana Environmental Health Association and made a brief presentation regarding the Board's pamphlet "Water Well Drilling for the Prospective Well Owner." The pamphlet is being well received across the state.

Twenty-seven field investigations have been completed by the Board's program specialist, the DNRC Water Rights Bureau Field Office personnel, and the DNRC hydrogeologists. The investigations included: unlicensed drillers, wells being drilled by the land owner without the required permit, visiting well construction sites, consumer complaints regarding well construction, abandonment of non-producing wells, and a flowing well.

Well log reports continue to be monitored by DNRC Water Rights Bureau Field Office personnel and the Board's program specialist. The reports are still showing apparent violations, particularly in the areas of the perforations above the static water level and lack of complete well test data. One other problem area that has been noted is the continuing practice of late filing of well log reports. By law (Section 85-2-516, MCA), a well log report form must be filed within 60 days after any well is completed. A question has been raised as to whether this meant completed and payment received. The opinion expressed by the Board's attorney is that completion means physically completed.

Apprenticeship rules and training remain in the discussion stage.

Board of Water Well Contractors Members

Dan L. Fraser is the Board member appointed by the Department of Health and Environmental Sciences. Dan is a licensed Professional Engineer and has served on the Board since January 1987. Prior to 1987, Dan attended meetings when Don Willems, former Board member from DHES, was unavailable.

Dan was born in Sundance, Wyoming. He moved to Broadus, Montana when he was eight. He is married and has four children.

Dan attended college at Montana State University in Bozeman from 1961 through 1965. He earned a B.S. with a major in biology and a minor in physical science from Eastern Montana College in Billings in 1965. He has an M.S. in biology from the University of Oklahoma, and an M.S. in civil engineering with emphasis in sanitary engineering from Montana State University in Bozeman.

Between 1969 and 1973, Dan had various types of employment which included: general construction, life insurance, trucking, oil fields, the U.S. Park Service, and operating his family dairy farm. Dan was also a science teacher, science department head, and athletic director for the Browning Public High School from 1966 to 1973.

In 1976, Dan went to work for the Department of Health and Environmental Sciences as a sanitary engineer. He was responsible for review of plans and specifications for public water and sewer systems, performance of sanitary surveys, and inspections of public water and sewer systems. Dan was also involved in training and certifying operators of public water and sewer systems, providing technical assistance to operators of public water plants, and reviewing monitoring reports from water systems and plants. In 1980, Dan became the manager of Montana's Public Water Supply Program, under DHES. He also currently serves as secretary to the Montana Board of Plumbers and as Region VIII's representative on the Board of Directors of the Association of State Drinking Water Administrators.

Dan has attended conferences and training sessions in groundwater, hydrogeology, water treatment, and the "Wellhead Protection Program Training Course for State Personnel" and Emergency Planning for Public Water Supplies, both offered by the Environmental Protection Agency. Dan has received the Montana Section of the American Water Works Association's Fuller Award, the Montana Environmental Health Association's Distinguished Service in Environmental Health award, and awards from Chi Epsilon and Gamma Omega Beta, which are civil and environmental engineering honoraries.

For further information
on any of the material
contained herein contact:
Diana C. Cutler, Program Specialist
Board of Water Well Contractors
1520 East Sixth Avenue
Helena, MT 59620
(406) 444-6643

DNRC
BOARD OF WATER WELL CONTRACTORS
1520 East Sixth Avenue
Helena, Montana 59620
(406) 444-6643